

SECTION 7.0

REV 2.1 2010

**510(K) SUMMARY OF SAFETY AND EFFECTIVENESS FOR THE BARD®
COLLAMEND™ IMPLANT****A. Submitter Information**

Submitter's Name: Davol Inc.
Address: Subsidiary of C. R. Bard, Inc.
100 Sockanosett Crossroad
Cranston, RI 02920
Telephone: (401) 215-2252
Fax: (401) 215-2031
Contact Person: Stephanic Baker
Date of Preparation: October 5, 2006

B. Device Name

Trade Name: Bard CollaMend Implant
Common/Usual Name: Surgical Mesh
Classification Name: Surgical Mesh

C. Predicate Device Name

Trade name: Bard CollaMend® Implant (Davol, Inc.)

Trade name: Permacol™ Implant (Tissue Science Laboratories, PLC.)

Trade name: Mersilene® Polyester Fiber Mesh (Ethicon, Inc.)

Trade name: SIS Plastic Surgery Matrix (Cook Biotech Incorporated)

Trade name: CosMatrix (TEI Biosciences, Inc.)

D. Device Description

The proposed device is a sterile, solid, sheet of lyophilized, acellular porcine dermal collagen and its constituent elastin fibers. It is processed to remove all non-collagenous cellular components and is cross-linked to increase strength and endurance. The proposed device allows cellular infiltration and replacement by host tissue, forming a strong repair of soft tissue defects. The proposed device will be made available in various sizes and shapes, ranging from a 4" x 6" ellipse to a 10" x 14" rectangle. The thickness of the devices will be approximately 1 mm. Surgeons will

need to rehydrate the product before implanting it into the patient. The proposed device will be marketed as a sterile, single use device.

E. Intended Use

The Bard CollaMend Implant is indicated to reinforce soft tissue where weakness exists, e.g., for repair of hernia and chest wall defects, and for the surgical repair of damaged or ruptured soft tissue membranes or reinforcement in plastic and reconstructive surgery.

F. Summary of Similarities and Differences in Technological Characteristics, Performance and Intended Use

The proposed device and the predicate CollaMend implant differ only in the intended use. The proposed device has an additional indication for use, "reinforcement in plastic and reconstructive surgery". The remaining predicates Permacol Implant, SIS Plastic Surgery Matrix and CosMatrix are all generally intended for use in plastic and reconstructive surgery. The predicate Mersilene Mesh is intended for use in the repair of soft tissue deficiencies including hernias.

The proposed device exactly the same in design as the predicate CollaMend Implant. The proposed device is similar in its basic design to the predicate devices Permacol Implant, Mersilene Mesh, SIS Plastic Surgery Matrix and CosMatrix. All of these devices are flexible flat sheets of material and are available in a variety of sizes and/or shapes.

The proposed device and all the predicates with the exception of Mersilene Mesh are manufactured from biologic materials. The proposed device and predicates CollaMend Implant and Permacol Implant are manufactured from acellular porcine dermal collagen. The predicate SIS Plastic Surgery Matrix is manufactured from porcine small intestinal submucosa. The predicate CosMatrix is manufactured from bovine derived material. The predicate device Mersilene Mesh is manufactured from multifilament polyester. The proposed device and predicates CollaMend Implant, Permacol Implant, Mersilene Mesh and CosMatrix are one layer thick. The predicate SIS Plastic Surgery Matrix is available in 1-ply and 4-ply thickness.

The manufacturing process for the proposed device and the predicate CollaMend Implant are exactly the same. The proposed device and the predicates CollaMend Implant, Permacol Implant, SIS Plastic Surgery Matrix and CosMatrix processes contain decontamination/viral inactivation steps. The proposed device and the predicates CollaMend

Implant and Permacol Implant processes also contain a cross-linking step. The proposed device and the predicate CollaMend are both chemically crosslinked with 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride (EDAC). The predicates SIS Plastic Surgery Matrix and CosMatrix are not chemically crosslinked.

The proposed device and the predicate CollaMend Implant and SIS Plastic Surgery Matrix are lyophilized before sterilization (Ethylene Oxide) and must be completely hydrated before use by immersion in sterile saline solution or sterile lactated ringers solution for a minimum of 3 minutes. The predicate Permacol Implant is packaged moist for sterilization (Radiation) and requires that the user rinse the implant before implantation in a patient. The predicate device CosMatrix is also supplied in a dried state and rehydrates in approximately sixty seconds. CosMatrix is sterilized by Ethylene Oxide.

G. Performance Data

Biocompatibility testing on the Bard CollaMend Implant has been completed. The biocompatibility test results show that the material used in the design and manufacture of the proposed device is non-toxic and non-sensitizing to biological tissues consistent with its intended use.

An animal implant study was performed to confirm the functionality and in-growth characteristics of the Bard CollaMend Implant as compared to the predicate Permacol Implant.

Laboratory test results demonstrate that the material chosen, the manufacturing process, and the design utilized for the Bard CollaMend Implant met the established specifications necessary for consistent performance during its intended use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Davol, Inc.
% Ms. Stephanie Baker
Regulatory Affairs Associate
100 Sockanossett Crossroad
Cranston, Rhode Island 02920

NOV 21 2006

Re: K063178

Trade/Device Name: Bard® CollaMend™ Implant
Regulation Number: 21 CFR 878.3300
Regulation Name: Surgical mesh
Regulatory Class: II
Product Code: FTM
Dated: October 13, 2006
Received: October 19, 2006

Dear Ms. Baker:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Mark N. Melkerson
Director
Division of General, Restorative
and Neurological Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K063178

Device Name: **Bard® CollaMend™ Implant**

Indications for Use: The Bard CollaMend Implant is indicated to reinforce soft tissue where weakness exists, e.g., for repair of hernia and chest wall defects, and for the surgical repair of damaged or ruptured soft tissue membranes or reinforcement in plastic and reconstructive surgery.

Prescription Use X
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use _____
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF
NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)


(Division Sign-C)

**Division of General, Restorative,
and Neurological Devices**

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